

Therapeutic Procedures and Care of a Child Nursing Considerations

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Abstract

As pediatric nurses, our mission is atraumatic care i.e. to shield children from needless trauma and pain caused by medical procedures. Child's preparation prior to the procedure includes need based assessment of the procedure and readiness for procedure, building trust and establishing rapport as well as clustering multiple procedures to minimize trauma. Prior to procedure informed consent is necessary whenever required. It is essential to follow family centred care and educate the child and family as family is the integral part of child's life. Preparation of child according to age, utilization of age appropriate equipment and age specific techniques, keen observation of child and surrounding are important aspect of childcare. Pharmacological, non-pharmacological and psychological strategies, involvement of loved one's aid for minimizing the pain fear anxiety and distress. The physical and psychological safety of child should be of prime concern while performing a nursing procedure on child, the aim should be to successfully complete the procedure minimizing the negative effects of the same. Therefore, it is vital that *any* medical procedure is ended in a positive manner.

Keyword: Child; Pediatric procedure; Preparation of Child; Developmental Consideration; Pain; Distress.

INTRODUCTION

Hospitalized pediatric patients may undergo a wide range of therapeutic treatments. The idea of pediatric nursing is atraumatic care, and, as pediatric nurses, our mission is to shield children

from needless trauma and pain caused by medical procedures.¹ Procedures that cause anxiety might influence how people approach healthcare going forward; some people may avoid getting medical treatment altogether or develop phobias.² Prior to, during, and following all procedure and treatments, it is nurse's responsibility to make sure that the patient is safe, comfortable and the procedure is carried out adhering to the standards established by the healthcare facility.

The ideal way to provide atraumatic treatment in all three phases is to use a multimodal strategy that combines pharmaceutical and non-pharmacological methods to lessen patient discomfort and enhance their ability to handle procedures.¹ In order to lessen the negative effects of the therapeutic procedure and to enhance the physical and emotional positive outcome, this article focuses on

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the child's preparation before, during, and after the procedure.

Child's Preparation Prior to the Procedure

When a medical or nursing procedure is carried out, it should be kept in mind that it does involve multiple people other than child. This may include family, sibling or any other significant or concerned person. Thus, preparation of child as well as parents or significant others is of utmost importance. The **preparation** prior to the procedure includes:

Assessing the Need and Readiness for Procedure

Before performing a procedure, it is essential to perform a need based assessment of the procedure so that unnecessary procedures can be avoided. The child and parental readiness, child's physical and psychological condition should be assessed thoroughly to prevent any kind of adverse affects. During assessment, any unusual or abnormal findings should be informed to the physician concerned and alternatives should be decided.^{1,3}

Clustering Multiple Procedures

If the child has to undergo multiple procedures, then take into account if it can be done concurrently. This will prevent unnecessary discomfort to the child and family thus enhancing cooperation.^{1,3}

Build Trust and Establish Rapport

Trust is facilitated when you can show that you are aware of something that the youngster finds meaningful. Evaluate the procedure experience. Talk about any prior procedure experience that the child or family may have had. Find out child's preferences. Establish a pleasant communication with parents which may increase the trust of child on the nurse.^{3,4}

Inform and Obtain Consent

Before undergoing any procedure, a parent, guardian, or mature minor should be asked for their informed consent. Offer choices, wherever possible. In the ward setting, verbal agreement is sufficient for clinical treatments. Procedures involving sedation or anaesthesia or any major procedure require written and signed consent. When applicable, parental consent should be obtained in addition to the child or young person's consent for the procedure. A child's cooperation with the process can imply assent just as much as

their vocal assent.^{1,4}

Follow Family Centred Care

Preparing the child's parent or primary care giver is important. In order to support the child during the procedure, it should be recommended for a family member to stay; however, it is always advisable to ascertain the parent's decision. Assign the parent a specific task; don't presume that they are aware of what to perform at any point during the process. Usually, this is done to soothe the youngster. Procedure information can help parents feel less anxious and improve the outcome.^{1,3,4,5}

Educate the Child and Family

Age appropriate explanation of procedure and related aspects should be done to improve the understanding of child. The parents also should be educated about the "what, why and how" of procedure and the care of the child in understandable language.^{1,6}

Prepare Age Appropriate Equipment's and Decide Age Specific Techniques

The quantity of information that kids desire to know about a surgery varies. The nurse may talk about it with the parent to decide how best to explain the process to the youngster. A child's age, developmental stage, and level of fear will all influence when the nurse should explain the process to them. In general, on the day of the medical operation, younger and more nervous youngsters can be informed. The best time to prepare toddlers and preschoolers is probably right before the intervention. Children who are older may be informed the day before or during the week of the surgery. Speak gently and stay away from using terms associated with medicine that can be confusing.^{7,8}

CHILD'S CARE DURING THE PROCEDURE

Carry out the Procedure in Appropriate Place and Environment

Research suggests that modifying the environment into comfortable and pleasant to child will reduce negative impact of procedure. For young children, it is advised to perform treatments in the treatment room in order to preserve the patient's bed and room as a safe environment.⁷ Negative experiences in patient's room makes the

child feel threatened whenever a staff member comes into their room. The preference of child or parents can be obtained to give them a sense of control. The equipment should be kept ready well before and, any equipment that can frighten the youngster should be kept out of sight. There should be adequate light. The furniture and other things present in the room should be non-threatening and pleasing to the child.

Before the child enters the procedural environment, nursing staff and equipment should be ready. To lessen anticipatory worry, fewer persons should be involved in the procedure than are necessary. Throughout the process, the patient should only hear from the person coaching or diverting their attention.

Involve Child and Parents

A study indicates that promoting the children's co-determination and participation in the procedures encouraged their consent and receptiveness and facilitated a successful outcome. In contrast, an absence of efforts to involve the children in the procedures contributed to the need for coercion to be employed by parents and nurses.⁸

Parental Presence

If a family member is able to support the child

during the procedure, it can help to lessen their distress. Give parents advance notice of the treatment so they are prepared; this will ease their worry and increase the likelihood that the medical procedure will be successful.^{2,5,8}

POSITIONING FOR COMFORT

At any time, given the needs for process, accessibility, and child safety, the youngster should be placed in a comfortable position. Upright positioning instead of using harsh restraint, gives the child a sense of control and allowing them to have closer contact with their parent or guardian. Immobilise the affected body portion just during the process. It is preferable to provide the child with the freedom to choose, whether to actively participate in the process, to see the procedure or turn away. The young child can be kept in parents lap if parents are willing and confident.^{2,8}

Use Age Appropriate Techniques

While performing any procedures in child or adolescent developmental status (Table 1), child understanding and need should be kept in mind. Remember each child is unique and each developmental stage is special.^{1,4,7}

Table 1: Developmental Consideration remember Age Specific Reactions

<i>Developmental age Psychosocial stage & developmental characteristics</i>	<i>Points to Remember</i>
Infant - Trust vs. Mistrust - Strangers' anxiety - Sensorimotor for stage of cognitive development - Imitation	- Promote the presence and involvement of parents and keep them in the child's line of sight - Involve and teach parents procedures which they can perform - Offer swaddling and soothing talk - Simulate a familiar routine - Attempt to assign the same nurse - Make advances in a non-threatening manner - Allow parents to comfort the child - Keep frightening objects out of sight - Pay close attention to light and sound stimulation - Permit non-nutritive sucking and rocking for comfort - Restrain adequately and appropriately restrain
Older Infant/Toddler - Autonomy vs. Shame and Doubt - Egocentric thought - Negative behaviour	- Encourage parents to be present take an active role in their child's - Be hospitable and encouraging. - Inform parents on the normal behaviour of toddlers. - Make use of your child's favourite toy or blanket as a security object. - Set limits and give choices on simple decision-making. - Maintain one voice to prevent confusion in child - Tell the child that it is OK to cry - Expect and ignore resistance, temper tantrum - Restrain adequately

table cont....

Preschooler

- Initiative vs. Guilt
- Preoperational phase of cognitive development
- Increased language skill
- Punishment obedience phase
- Fear of intrusion /body mutilation

School Age

- Industry vs. Inferiority
- Interested in knowing
- Concrete thought
- Improved self control

Adolescent

- Identity vs Identity Diffusion
- Importance to appearance
- Striving for independence
- Peer relationship

- Recognise the child's anxiety about the procedure
- If at all feasible, encourage the parent to be present and to take part in the child's care
- Offer consolation and assistance
- Provide play and diversional activities
- Avoid intrusive procedures as much as possible
- Assess child's perception by asking to draw a picture and tell about it
- Find out what does the child knows
- Explain using terms from science and the way the body works
- When instructing a youngster, pose more questions to assist them to overcome feelings of inadequacy
- Use visual aids like audiovisuals, images, and body outlines
- Provide strategies for staying in control, such as deep breathing exercises
- Obtain collaboration Provide constructive criticism Incorporate decision-making (best location, best time)
- Promote active involvement in caregiving
- Maintain privacy
- Evaluate adolescent understanding Encourage questioning regarding fears, or risks
- Involve in decision-making
- Participate in making decisions
- Check if the adolescent wants their parent present
- Minimise the number of limitations to the minimum
- Provide suggestions on how to stay in control
- Offer positive reinforcement
- Provide privacy for care
- Attend to children's concerns about appearance and grooming

Use of Restraints

The use of restraint should be considered only for the safety. Employ the least amount of restriction. Consent and appropriate information education should be taken into account. Select the appropriate device and ensure proper fit. Make sure that the knots are simple to untie thus allow for rapid access. Regularly examine for circulation, feeling, and motion. Maintain the range of motion movement. Always document the findings from neurovascular checks.^{4,6,8}

PROMOTING CHILD CONTROL

Giving the patient a significant role might increase their sense of control and mastery. Give the patient options so; they can participate actively in their medical treatment. Engage them in some simple tasks rather than remaining still. Offer child choices for example, which type of tape or dressing to be used, which position the child prefers (if possible).¹

Atraumatic Technique - Do no harm

While performing a nursing procedure on child, the aim should be to successfully complete

the procedure minimizing the negative effects of the same. The foundation of this principle lies in minimizing separation of child from family, identifying child/family stressors, minimizing/preventing pain, and promoting parent professional partnerships.¹

Non-Pharmacological and Psychological Strategies

During hospitalization, the use of psychological and nonpharmacological strategies not only reduces pain, it relieves anxiety, fear and improves coping level of child as well as parents while the procedures are performed. These techniques may include a play, distraction, deep breathing, use of cold therapy, vibration and cooling devices like buzzy, breast feeding, sweet solution during therapy, and psychological therapies like Guided Imagery, Storytelling, Meditation, Progressive Muscle Relaxation.^{8,9}

Distraction

In order to help a youngster focus attention on something other than pain and the fear involved with the treatment, distraction entails involving them in a wide range of activities. Choose kid appropriate activities based on their developmental

stage. Children's pain and suffering due to needles can be effectively reduced with the use of distraction cards, music therapy, toys, kaleidoscopes, and virtual reality. It is seen as a simple, affordable strategy that requires little training to put into practice.^{8,9,10}

Cold and Vibration Intervention

A study on Impact of Cold and Vibration Intervention on Fear, Anxiety, and Distress during Procedural Procedures, was discovered that during needle-related operations, cold and vibration stimulation were beneficial in lowering anxiety and behavioural distress. It has been discovered that vapocoolant spray works well to increase procedure success rate.⁸⁻¹⁰

Deep Breathing

During an intervention, deep breathing exercises can be utilised as a coping mechanism to assist a patient in controlling their anxiety and pain perceptions. By stimulating the parasympathetic nervous system, which promotes relaxation and calm, an increase in oxygen delivery to the brain can assist to lower anxiety and the fight-or-flight response of the sympathetic nervous system. This technique can be effectively applied by activities like blowing bubbles, birthday candles, or smelling flower or by count breathing etc.^{8,9,10}

Guided Imagery

Patients can be trained to utilise guided imagery to help them cope with painful or anxiety-inducing situations. During guided imagery, the patient is asked to visualise a peaceful location. You can use guided imagery that is straightforward or quite complex.²

Be Observant

As the children are developing verbal and cognitive ability they may not be able to verbalize any discomfort and also the child may regress with little changes thus, a nurse has to be observant for deterioration of child's condition.¹⁰

Be Honest

When a child asks questions about a procedure, parents and healthcare professionals should answer honestly in order to gain the child's trust. The nurse will not take any action. Statements like "It won't hurt a bit" ought to be avoided.^{1,10}

Care of Child after the Procedure

It is the nurses' responsibility to facilitate recovery and resilience after an invasive or non-invasive therapeutic procedure. Children's memories of painful experiences are strong predictors of subsequent reports of pain intensity. Therefore, it is integral that any medical procedure is ended in a positive manner for the patient by: Reducing the child's distress before leaving the procedural setting can help to reduce negative associations with treatment spaces.¹¹ Offer the patient an opportunity for cuddles with the caregiver, provide positive reinforcement of what went well during the procedure and asking them to make choices about what they are doing next may help to promote recovery. 'Book ending' (positive experiences before and after) a procedure can help to reduce negative associations with medical interventions.

Honestly take feedback

After the procedure a debriefing and feedback from patient and their family is an important aspect. Discuss with child and caregiver the experience during procedure what was good or bad; and what can be improved. Enquire if there is anything the child would like to attempt in a different way next time. Avoid any type of criticism.^{2,3}

Allow Child and Parents to Express Emotions and Verbalize

The child should be allowed to verbalize the experiences and express emotions after the procedure. This will help in releasing negative emotions and help the caregivers to understand the concerns.^{4,10}

Use Positive Reinforcement

Positive reinforces include a parent's hug or a pat on the back indicating that the youngster is doing well. There will be positive occurrences or results that will follow the behaviour. When praise or a clear reward is added, a behaviour or response is reinforced in a positive reinforcement scenario.^{2,8}

Allow Parental Involvement

The parents should be allowed to be with the child after the procedure. Parental touch and hold will help child to feel more secure.^{2,8}

Documentation and Communication

Recording the procedure in efficient way will also help for the creation of better experiences next time. Document the child's response to the medical procedure and procedural preferences to help inform subsequent interventions. While documenting important aspect should be included, such as preparation, positioning/restraint used, who was present in the room and their roles, forms of non-pharmacological strategies used, details of any specific parent or patient requests, use of medication or other strategies and lastly the outcome of procedure and the attempts made. The special observations and needs should be communicated to concerned personnel.^{1,2,8,10}

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